Supplemental Response to Restriction Requirement
Docket No. 020.0335.US.CON

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1   1.   (currently amended): A system for collection and analysis of
2   patient information for automated remote patient care, comprising:
3   [[a]] an implantable medical device adapted to be implanted for an
4   individual patient regularly recording and storing measures sets comprising
5   individual measures which each relate to patient information;
6   a database collecting one or more patient care records, organizing one or
7   more patient care records which each comprise a plurality of the collected
8   measures sets, and storing the collected measures set into a patient care record for
9   the individual patient within a database; and
10   a server periodically receiving a set of the collected measures from
11   the implantable medical device adapted to be implanted, and analyzing one or
12   more of the collected measures sets in the patient care record for the individual
13   patient relative to one or more other collected measures sets stored in the database
14   server to determine a patient status indicator.

1   2.   (original): A system according to Claim 1, the server further
2   comprising:
3   a comparison module comparing an initial measure selected from the one
4   or more collected measures sets to a sibling measure selected from the one or
5   more other collected measures sets, the initial measure and the sibling measure
6   both relating to the same type of patient information.

1   3.   (original): A system according to Claim 1, the server further
2   comprising:

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3   a derivation module determining an initial derived measure using at least

4   one measure selected from the one or more collected measures sets and

5   determining a sibling derived measure using at least one measure selected from

6   the one or more other collected measures sets, the initial derived measure and the

7   sibling derived measure both relating to the same type of derived patient

8   information; and

9   a comparison module comparing the initial derived measure to the sibling

10   derived measure.

1   4.   (original): A system according to Claim 1, the server further

2   comprising:

3   a comparison module comparing an initial measure selected from the one

4   or more collected measures sets to a peer measure selected from the one or more

5   other collected measures sets, the initial measure relating to a different type of

6   patient information than the peer measure.

1   5.   (original): A system according to Claim 1, the server further

2   comprising:

3   a derivation module determining a peer derived measure using at least one

4   measure selected from the one or more other collected measures sets; and

5   a comparison module comparing an initial measure selected from the one

6   or more collected measures sets to the peer derived measure, the initial measure

7   relating to a different type of patient information than the derived patient

8   information to which the peer derived measure relates.

1   6.   (original): A system according to Claim 1, the server further

2   comprising:

3   a derivation module determining an initial derived measure using at least

4   one measure selected from the one or more collected measures sets; and

5   a comparison module comparing the initial derived measure to a peer

6   measure selected from the one or more other collected measures sets, the initial

7 derived measure relating to a different type of derived patient information than the

8 patient information to which the peer measure relates.

1   7.   (original): A system according to Claim 1, the server further

2 comprising:

3   a derivation module determining an initial derived measure using at least

4 one measure selected from the one or more collected measures sets and

5 determining a peer derived measure using at least one measure selected from the

6 one or more other collected measures sets; and

7   a comparison module comparing the initial derived measure to the peer

8 derived measure, the initial derived measure relating to a different type of derived

9 patient information than the derived patient information to which the peer derived

10 measure relates.

1   8.   (original): A system according to Claim 1, wherein the one or more

2 other collected measures sets are stored in the patient care record for the

3 individual patient for whom the patient care indicator has been determined.

1   9.   (original): A system according to Claim 1, wherein the one or more

2 other collected measures sets are stored in the patient care records for a group of

3 one or more other individual patients.

1   10.   (currently amended): A system according to Claim 1, further

2 comprising:

3   a collection client communicatively interposed between the implantable

4 medical device adapted to be implanted and the communications link, the

5 collection client retrieving the collected measures set and downloading the

6 collected measures set from the collection client into the network server over the

7 communications link.

1   11.   (original): A system according to Claim 10, wherein the collection

2 client is selected from the group consisting of a programmer, interrogator,

3   recorder, monitor, telemetered signals transceiver, personal computer, digital data

4   processor, and combinations thereof.

1   12.   (original): A system according to Claim 1, the server being

2   interfaced to a feedback communications link and further comprising:

3   a feedback client interfaced to the feedback communications link over

4   which automated feedback based on the patient status indicator is provided to the

5   individual patient from the server.

1   13.   (original): A system according to Claim 12, the server further

2   comprising:

3   a feedback module providing tiered feedback comprising:

4   at a first level of feedback, communicating an interpretation of the

5   patient status indicator to the individual patient;

6   at a second level of feedback, communicating a notification of

7   potential medical concern based on the patient status indicator to the individual

8   patient;

9   at a third level of feedback, communicating a notification of

10   potential medical concern based on the patient status indicator to medical

11   personnel in local proximity to the individual patient; and

12   at a fourth level of feedback, communicating a set of

13   reprogramming instructions based on the patient status indicator to the

14   implantable medical device.

1   14.   (original): A system according to Claim 12, wherein the automated

2   feedback comprises at least one of the group consisting of a peer group status

3   indicator, a historical status indicator, a trend indicator, a medicinal efficacy

4   indicator, and a wellness indicator.

1   15.   (original): A system according to Claim 12, wherein the feedback

2   communications link comprises at least one of the following: internetwork link,

3   intranetwork link, serial link, data telephone link, satellite link, radio-frequency

4 link, infrared link, fiber optic link, coaxial cable link, television link, and

5 combinations thereof.

1   16. (original): A system according to Claim 12, wherein the feedback

2 client is selected from the group consisting of a personal computer, facsimile

3 machine, telephone instrument, network computer, wireless computer, personal

4 data assistant, television, digital data processor, and combinations thereof.

1   17. (original): A system according to Claim 1, the server further

2 comprising:

3   an analysis module dynamically analyzing the one or more of the collected

4 measures sets in the patient care record for the individual patient.

1   18. (original): A system according to Claim 1, the server further

2 comprising:

3   an analysis module analyzing the one or more of the collected measures

4 sets in the patient care record for the individual patient in a batch comprising the

5 one or more of the collected measures sets in patient care records for a plurality of

6 individual patients.

1   19. (original): A system according to Claim 1, wherein the

2 communications link comprises at least one of the following: internetwork link,

3 intranetwork link, serial link, data telephone link, satellite link, radio-frequency

4 link, infrared link, fiber optic link, coaxial cable link, television link, and

5 combinations thereof.

1   20. (original): A system according to Claim 1, wherein the database

2 comprises at least one of the following: volatile storage, non-volatile storage,

3 removable storage, fixed storage, random access storage, sequential access

4 storage, permanent storage, erasable storage, and combinations thereof.

1   21. (original): A system according to Claim 1, wherein the

2 organization of the database comprises at least one of the following: flat file,

3   hierarchical database server, relational database server, distributed database
4   server, and combinations thereof.

1   22.   (original): A system according to Claim 1, wherein the server is
2   selected from the group consisting of a personal computer, minicomputer,
3   mainframe computer, supercomputer, parallel computer, workstation, digital data
4   processor, and combinations thereof.

1   23.   (original): A system according to Claim 1, wherein the medical
2   device is selected from the group consisting of a pacemaker, implantable
3   cardioverter defibrillator, implantable heart failure monitor, implantable event
4   monitor, implantable cardiopulmonary monitor, implantable metabolic monitor or
5   device, endocrinology monitor or device, hematology monitor or device,
6   implantable neuromuscular monitor or device, implantable gastrointestinal
7   monitor or device, genitourinary monitor or device, and combinations thereof.

1   24.   (original): A system according to Claim 1, wherein the set of
2   collected measures comprises at least one of the following: atrial electrical
3   activity, ventricular electrical activity, time of day, activity level, cardiac output,
4   oxygen level, cardiovascular pressure measures, pulmonary measures,
5   interventions made, and combinations thereof.

1   25.   (original): A system according to Claim 24, the set of collected
2   measures further comprising derived measures selected from the group consisting
3   of linear measures derived from the set of collected measures, non-linear
4   measures derived from the set of collected measures, and combinations thereof.

1   26.   (withdrawn): A method for collection and analysis of patient
2   information for automated remote patient care, comprising:
3   regularly recording and storing measures sets comprising individual
4   measures which each relate to patient information [[by a]] using an implantable
5   medical device adapted to be implanted for an individual patient;

6   periodically receiving a set of the collected measures from the <u>implantable</u>

7 medical device ~~adapted to be implanted~~;

8   collecting one or more patient care records into a database, comprising:

9   organizing one or more patient care records which each comprise a

10 plurality of the collected measures sets;

11   storing the collected measures set into a patient care record for the

12 individual patient within the database; and

13   analyzing one or more of the collected measures sets in the patient care

14 record for the individual patient relative to one or more other collected measures

15 sets stored in the database to determine a patient status indicator.

1   27.   (withdrawn): A method according to Claim 26, the operation of

2 analyzing the one or more collected measures sets further comprising:

3   comparing an initial measure selected from the one or more collected

4 measures sets to a sibling measure selected from the one or more other collected

5 measures sets, the initial measure and the sibling measure both relating to the

6 same type of patient information.

1   28.   (withdrawn): A method according to Claim 26, the operation of

2 analyzing the one or more collected measures sets further comprising:

3   determining an initial derived measure using at least one measure selected

4 from the one or more collected measures sets;

5   determining a sibling derived measure using at least one measure selected

6 from the one or more other collected measures sets, the initial derived measure

7 and the sibling derived measure both relating to the same type of derived patient

8 information; and

9   comparing the initial derived measure to the sibling derived measure.

1   29.   (withdrawn): A method according to Claim 26, the operation of

2 analyzing the one or more collected measures sets further comprising:

3   comparing an initial measure selected from the one or more collected

4   measures sets to a peer measure selected from the one or more other collected

5   measures sets, the initial measure relating to a different type of patient

6   information than the peer measure.

1   30.   (withdrawn): A method according to Claim 26, the operation of

2   analyzing the one or more collected measures sets further comprising:

3   determining a peer derived measure using at least one measure selected

4   from the one or more other collected measures sets; and

5   comparing an initial measure selected from the one or more collected

6   measures sets to the peer derived measure, the initial measure relating to a

7   different type of patient information than the derived patient information to which

8   the peer derived measure relates.

1   31.   (withdrawn): A method according to Claim 26, the operation of

2   analyzing the one or more collected measures sets further comprising:

3   determining an initial derived measure using at least one measure selected

4   from the one or more collected measures sets; and

5   comparing the initial derived measure to a peer measure selected from the

6   one or more other collected measures sets, the initial derived measure relating to a

7   different type of derived patient information than the patient information to which

8   the peer measure relates.

1   32.   (withdrawn): A method according to Claim 26, the operation of

2   analyzing the one or more collected measures sets further comprising:

3   determining an initial derived measure using at least one measure selected

4   from the one or more collected measures sets;

5   determining a peer derived measure using at least one measure selected

6   from the one or more other collected measures sets; and

7   comparing the initial derived measure to the peer derived measure, the

8   initial derived measure relating to a different type of derived patient information

9   than the derived patient information to which the peer derived measure relates.

1   33.   (withdrawn): A method according to Claim 26, wherein the one or

2   more other collected measures sets are stored in the patient care record for the

3   individual patient for whom the patient care indicator has been determined.

1   34.   (withdrawn): A method according to Claim 26, wherein the one or

2   more other collected measures sets are stored in the patient care records for a

3   group of one or more other individual patients.

1   35.   (withdrawn): A method according to Claim 26, further comprising:

2   retrieving the collected measures set into a collection client

3   communicatively interposed between the implantable medical device adapted to

4   be implanted and a network server; and

5   downloading the collected measures set from the collection client into the

6   network server.

1   36.   (withdrawn): A method according to Claim 35, wherein the

2   collection client is selected from the group consisting of a programmer,

3   interrogator, recorder, monitor, telemetered signals transceiver, personal

4   computer, digital data processor, and combinations thereof.

1   37.   (withdrawn): A method according to Claim 26, further comprising:

2   providing automated feedback based on the patient status indicator to the

3   individual patient configured between a network server and a feedback client.

1   38.   (withdrawn): A method according to Claim 37, further comprising:

2   providing tiered feedback comprising:

3   at a first level of feedback, communicating an interpretation of the

4   patient status indicator to the individual patient;

5   at a second level of feedback, communicating a notification of

6   potential medical concern based on the patient status indicator to the individual

7   patient;

8   at a third level of feedback, communicating a notification of

9   potential medical concern based on the patient status indicator to medical

10   personnel in local proximity to the individual patient; and

11   at a fourth level of feedback, communicating a set of

12   reprogramming instructions based on the patient status indicator to the

13   implantable medical device.

1   39.   (withdrawn): A method according to Claim 37, wherein the

2   automated feedback comprises at least one of the group consisting of a peer group

3   status indicator, a historical status indicator, a trend indicator, a medicinal efficacy

4   indicator, and a wellness indicator.

1   40.   (withdrawn): A method according to Claim 37, wherein a feedback

2   communications link comprises at least one of the following: internetwork link,

3   intranetwork link, serial link, data telephone link, satellite link, radio-frequency

4   link, infrared link, fiber optic link, coaxial cable link, television link, and

5   combinations thereof.

1   41.   (withdrawn): A method according to Claim 37, wherein the

2   feedback client is selected from the group consisting of a personal computer,

3   facsimile machine, telephone instrument, network computer, wireless computer,

4   personal data assistant, television, digital data processor, and combinations

5   thereof.

1   42.   (withdrawn): A method according to Claim 26, further comprising:

2   dynamically analyzing the one or more of the collected measures sets in

3   the patient care record for the individual patient.

1   43.   (withdrawn): A method according to Claim 26, further comprising:

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2   analyzing the one or more of the collected measures sets in the patient care

3   record for the individual patient in a batch comprising the one or more of the

4   collected measures sets in patient care records for a plurality of individual

5   patients.

1   44.   (withdrawn): A method according to Claim 26, wherein a

2   communications link comprises at least one of the following: internetwork link,

3   intranetwork link, serial link, data telephone link, satellite link, radio-frequency

4   link, infrared link, fiber optic link, coaxial cable link, television link, and

5   combinations thereof.

1   45.   (withdrawn): A method according to Claim 26, wherein the

2   database comprises at least one of the following: volatile storage, non-volatile

3   storage, removable storage, fixed storage, random access storage, sequential

4   access storage, permanent storage, erasable storage, and combinations thereof.

1   46.   (withdrawn): A method according to Claim 45, wherein an

2   organization of the database comprises at least one of the following: flat file,

3   hierarchical database server, relational database server, distributed database

4   server, and combinations thereof.

1   47.   (withdrawn): A method according to Claim 26, wherein a server is

2   selected from the group consisting of a personal computer, minicomputer,

3   mainframe computer, supercomputer, parallel computer, workstation, digital data

4   processor, and combinations thereof.

1   48.   (withdrawn): A method according to Claim 26, wherein the

2   medical device is selected from the group consisting of a pacemaker, implantable

3   cardioverter defibrillator, implantable heart failure monitor, implantable event

4   monitor, implantable cardiopulmonary monitor, implantable metabolic monitor or

5   device, endocrinology monitor or device, hematological monitor or device,

6   implantable neuromuscular monitor or device, implantable gastrointestinal

7   monitor or device, genitourinary monitor or device, and combinations thereof.

1   49.   (withdrawn): A method according to Claim 26, wherein the set of

2   collected measures comprises at least one of the following: atrial electrical

3   activity, ventricular electrical activity, time of day, activity level, cardiac output,

4   oxygen level, cardiovascular pressure measures, pulmonary measures,

5   interventions made, and combinations thereof.

1   50.   (withdrawn): A method according to Claim 49, the set of collected

2   measures further comprising derived measures selected from the group consisting

3   of linear measures derived from the set of collected measures, non-linear

4   measures derived from the set of collected measures, and combinations thereof.

1   51.   (withdrawn): A computer-readable storage medium holding code

2   for collection and analysis of patient information for automated remote patient

3   care, comprising:

4   code for regularly recording and storing measures sets comprising

5   individual measures which each relate to patient information [[by a]] using an

6   implantable medical device adapted to be implanted for an individual patient;

7   code for periodically receiving a set of the collected measures from the

8   implantable medical device adapted to be implanted;

9   code for collecting one or more patient care records into a database,

10   comprising organizing one or more patient care records which each comprise a

11   plurality of the collected measures sets, and storing the collected measures set into

12   a patient care record for the individual patient within the database; and

13   code for analyzing one or more of the collected measures sets in the

14   patient care record for the individual patient relative to one or more other

15   collected measures sets stored in the database to determine a patient status

16   indicator.

1   52.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a comparison module comparing an initial measure

4   selected from the one or more collected measures sets to a sibling measure

5   selected from the one or more other collected measures sets, the initial measure

6   and the sibling measure both relating to the same type of patient information.

1   53.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a derivation module determining an initial derived

4   measure using at least one measure selected from the one or more collected

5   measures sets and determining a sibling derived measure using at least one

6   measure selected from the one or more other collected measures sets, the initial

7   derived measure and the sibling derived measure both relating to the same type of

8   derived patient information; and

9   code for operating a comparison module comparing the initial derived

10   measure to the sibling derived measure.

1   54.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a comparison module comparing an initial measure

4   selected from the one or more collected measures sets to a peer measure selected

5   from the one or more other collected measures sets, the initial measure relating to

6   a different type of patient information than the peer measure.

1   55.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a derivation module determining a peer derived

4   measure using at least one measure selected from the one or more other collected

5   measures sets; and

6   code for operating a comparison module comparing an initial measure

7   selected from the one or more collected measures sets to the peer derived

8   measure, the initial measure relating to a different type of patient information than

9   the derived patient information to which the peer derived measure relates.

1   56.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a derivation module determining an initial derived

4   measure using at least one measure selected from the one or more collected

5   measures sets; and

6   code for operating a comparison module comparing the initial derived

7   measure to a peer measure selected from the one or more other collected measures

8   sets, the initial derived measure relating to a different type of derived patient

9   information than the patient information to which the peer measure relates.

1   57.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a derivation module determining an initial derived

4   measure using at least one measure selected from the one or more collected

5   measures sets and determining a peer derived measure using at least one measure

6   selected from the one or more other collected measures sets; and

7   code for operating a comparison module comparing the initial derived

8   measure to the peer derived measure, the initial derived measure relating to a

9   different type of derived patient information than the derived patient information

10   to which the peer derived measure relates.

1   58.   (withdrawn): A storage medium according to Claim 51, further

2   comprising:

3   code for operating a collection client communicatively interposed between

4   the implantable medical device adapted to be implanted and a network server, the

5   collection client retrieving the collected measures set and downloading the

6   collected measures set from the collection client into the network server.

1   59.   (withdrawn): A storage medium according to Claim 51, further

2   comprising:

3   code for operating a feedback client interfaced to a feedback

4   communications link over which automated feedback based on the patient status

5   indicator is provided to the individual patient from the network server.

1   60.   (withdrawn): A storage medium according to Claim 59, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating a feedback module providing tiered feedback

4   comprising:

5   at a first level of feedback, code for operatively communicating an

6   interpretation of the patient status indicator to the individual patient over the

7   feedback communications link;

8   at a second level of feedback, code for operatively communicating

9   a notification of potential medical concern based on the patient status indicator to

10   the individual patient over the feedback communications link;

11   at a third level of feedback, code for operatively communicating a

12   notification of potential medical concern based on the patient status indicator to

13   medical personnel in local proximity to the individual patient over the feedback

14   communications link; and

15   at a fourth level of feedback, code for operatively communicating a

16   set of reprogramming instructions based on the patient status indicator to the

17   implantable medical device over the feedback communications link.

1   61.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating an analysis module dynamically analyzing the one or

4   more of the collected measures sets in the patient care record for the individual

5   patient.

1   62.   (withdrawn): A storage medium according to Claim 51, the code

2   for analyzing one or more of the collected measures sets further comprising:

3   code for operating an analysis module analyzing the one or more of the

4   collected measures sets in the patient care record for the individual patient in a

5   batch comprising the one or more of the collected measures sets in patient care

6   records for a plurality of individual patients.

1   63.   (withdrawn): A system for collection and analysis of patient

2   information for automated remote patient care, comprising:

3   a database collecting one or more patient care records, comprising:

4   a schema defining each patient care record comprising a plurality

5   of collected measurements sets; and

6   each collected measurements set comprising individual

7   measurements which each relate to patient information recorded [[by a]] using an

8   implantable medical device adapted to be implanted for an individual patient;

9   a server processing at least one of the collected measurements sets,

10   comprising:

11   a receiver receiving a set of the collected measurements regularly

12   stored and periodically sent from the implantable medical device;

13   a database module storing the collected measurements set into the

14   patient care record in the database for the individual patient;

15   an analysis module analyzing one or more of the collected

16   measurements sets in the patient care record for the individual patient relative to

17   one or more other collected measurements sets stored in the patient care record of

18   the individual patient; and

19   a feedback module sending feedback based on the analysis of the

20   one or more collected measurements sets .

1   64.   (withdrawn): A system according to Claim 63, the analysis module

2   further comprising:

3   a comparison module comparing at least one collected measurement

4   selected from the one or more collected measurements sets to at least one other

5   collected measurement selected from the one or more other collected

6   measurements sets, the at least one collected measurement and the at least one

7   other collected measurement both relating to the same type of patient information.

1   65.   (withdrawn): A system according to Claim 63, the analysis module

2   further comprising:

3   a comparison module comparing at least one collected measurement

4   selected from the one or more collected measurements sets to at least one other

5   collected measurement selected from the one or more other collected

6   measurements sets, the at least one collected measurement and the at least one

7   other collected measurement both relating to different types of patient

8   information.

1   66.   (withdrawn): A system according to Claim 63, the analysis module

2   further comprising:

3   a derivation module determining at least one derived measurement using

4   at least one collected measurement selected from at least one of the one or more

5   collected measurements sets and the one or more other collected measurements

6   sets; and

7   a comparison module comparing the at least one derived measurement to

8   at least one measurement selected from at least one of the one or more collected

9   measurements sets and the one or more other collected measurements sets.

1   67.   (withdrawn): A system according to Claim 63, the analysis module

2   further comprising:

3   a derivation module determining at least one derived measurement using

4   at least one collected measurement selected from at least one of the one or more

5   collected measurements sets and the one or more other collected measurements

6   sets and determining at least one other derived measurement using at least one

7   collected measurement selected from at least one of the one or more collected

8   measurements sets and the one or more other collected measurements sets; and

9   a comparison module comparing the at least one derived measurement to

10   the at least one other derived measurement.

1   68.   (withdrawn): A system according to Claim 63, the feedback

2   module further comprising providing tiered feedback comprising:

3   at a first level of feedback, communicating an interpretation of the analysis

4   of the one or more collected measurements sets to the individual patient;

5   at a second level of feedback, communicating a notification of potential

6   medical concern based on the analysis of the one or more collected measurements

7   sets to the individual patient;

8   at a third level of feedback, communicating a notification of potential

9   medical concern based on the analysis of the one or more collected measurements

10   sets to medical personnel in local proximity to the individual patient; and

11   at a fourth level of feedback, communicating a set of reprogramming

12   instructions based on analysis of the one or more collected measurements sets to

13   the implantable medical device.

1   69.   (withdrawn): A method for collection and analysis of patient

2   information for automated remote patient care, comprising:

3   collecting one or more patient care records in a database, comprising:

4   defining each patient care record comprising a plurality of

5   collected measurements sets; and

6   specifying each collected measurements set comprising individual

7   measurements which each relate to patient information recorded [[by a]] using an

8   implantable medical device adapted-to-be-implanted for an individual patient;

9   processing at least one of the collected measurements sets, comprising:

10   receiving a set of the collected measurements regularly stored and

11   periodically sent from the implantable medical device;

12   storing the collected measurements set into the patient care record

13   in the database for the individual patient;

14   analyzing one or more of the collected measurements sets in the

15   patient care record for the individual patient relative to one or more other

16   collected measurements sets stored in the patient care record of the individual

17   patient; and

18   sending feedback based on the analysis of the one or more

19   collected measurements sets.

1   70.   (withdrawn): A method according to Claim 69, the operation of

2   analyzing further comprising:

3   comparing at least one collected measurement selected from the one or

4   more collected measurements sets to at least one other collected measurement

5   selected from the one or more other collected measurements sets, the at least one

6   collected measurement and the at least one other collected measurement both

7   relating to the same type of patient information.

1   71.   (withdrawn): A method according to Claim 69, the operation of

2   analyzing further comprising:

3   comparing at least one collected measurement selected from the one or

4   more collected measurements sets to at least one other collected measurement

5   selected from the one or more other collected measurements sets, the at least one

6   collected measurement and the at least one other collected measurement both

7   relating to different types of patient information.

1   72.   (withdrawn): A method according to Claim 69, the operation of

2   analyzing further comprising:

3   determining at least one derived measurement using at least one collected

4   measurement selected from at least one of the one or more collected

5   measurements sets and the one or more other collected measurements sets; and

6   comparing the at least one derived measurement to at least one

7   measurement selected from at least one of the one or more collected

8   measurements sets and the one or more other collected measurements sets.

1   73.   (withdrawn): A method according to Claim 69, the operation of

2   analyzing further comprising:

3   determining at least one derived measurement using at least one collected

4   measurement selected from at least one of the one or more collected

5   measurements sets and the one or more other collected measurements sets;

6   determining at least one other derived measurement using at least one

7   collected measurement selected from at least one of the one or more collected

8   measurements sets and the one or more other collected measurements sets; and

9   comparing the at least one derived measurement to the at least one other

10   derived measurement.

1   74.   (withdrawn): A method according to Claim 69, the operation of

2   sending feedback further comprising:

3   providing tiered feedback comprising:

4   at a first level of feedback, communicating an interpretation of the

5   analysis of the one or more collected measurements sets to the individual patient;

6   at a second level of feedback, communicating a notification of

7   potential medical concern based on the analysis of the one or more collected

8   measurements sets to the individual patient;

9   at a third level of feedback, communicating a notification of

10   potential medical concern based on the analysis of the one or more collected

11   measurements sets to medical personnel in local proximity to the individual

12   patient; and

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13   at a fourth level of feedback, communicating a set of

14   reprogramming instructions based on analysis of the one or more collected

15   measurements sets to the implantable medical device.

1   75.   (withdrawn): A computer-readable storage medium holding code

2   for collection and analysis of patient information for automated remote patient

3   care, comprising:

4   code for collecting one or more patient care records in a database,

5   comprising:

6   code for defining each patient care record comprising a plurality of

7   collected measurements sets; and

8   code for specifying each collected measurements set comprising

9   individual measurements which each relate to patient information recorded [[by

10   a]] using an implantable medical device adapted-to-be-implanted for an individual

11   patient;

12   code for processing information-for at least one of the collected

13   measurements sets, comprising:

14   code for receiving a set of the collected measurements regularly

15   stored and periodically sent from the implantable medical device;

16   code for storing the collected measurements set into the patient

17   care record in the database for the individual patient;

18   code for analyzing one or more of the collected measurements sets

19   in the patient care record for the individual patient relative to one or more other

20   collected measurements sets stored in the patient care record of the individual

21   patient; and

22   code for sending feedback based on the analysis of the one or more

23   collected measurements sets.

1   76.   (withdrawn): A storage medium according to Claim 75, the

2   operation of analyzing further comprising:

3   code for comparing at least one collected measurement selected from the

4   one or more collected measurements sets to at least one other collected

5   measurement selected from the one or more other collected measurements sets,

6   the at least one collected measurement and the at least one other collected

7   measurement both relating to the same type of patient information.

1   77.   (withdrawn): A storage medium according to Claim 75, the

2   operation of analyzing further comprising:

3   code for comparing at least one collected measurement selected from the

4   one or more collected measurements sets to at least one other collected

5   measurement selected from the one or more other collected measurements sets,

6   the at least one collected measurement and the at least one other collected

7   measurement both relating to different types of patient information.

1   78.   (withdrawn): A storage medium according to Claim 75, the

2   operation of analyzing further comprising:

3   code for determining at least one derived measurement using at least one

4   collected measurement selected from at least one of the one or more collected

5   measurements sets and the one or more other collected measurements sets; and

6   code for comparing the at least one derived measurement to at least one

7   measurement selected from at least one of the one or more collected

8   measurements sets and the one or more other collected measurements sets.

1   79.   (withdrawn): A storage medium according to Claim 75, the

2   operation of analyzing further comprising:

3   code for determining at least one derived measurement using at least one

4   collected measurement selected from at least one of the one or more collected

5   measurements sets and the one or more other collected measurements sets;

6   code for determining at least one other derived measurement using at least

7   one collected measurement selected from at least one of the one or more collected

8   measurements sets and the one or more other collected measurements sets; and

9   code for comparing the at least one derived measurement to the at least

10   one other derived measurement.

1   80.   (withdrawn): A storage medium according to Claim 75, the

2   operation of sending feedback further comprising:

3   code for providing tiered feedback comprising:

4   at a first level of feedback, code for communicating an

5   interpretation of the analysis of the one or more collected measurements sets to

6   the individual patient;

7   at a second level of feedback, code for communicating a

8   notification of potential medical concern based on the analysis of the one or more

9   collected measurements sets to the individual patient;

10   at a third level of feedback, code for communicating a notification

11   of potential medical concern based on the analysis of the one or more collected

12   measurements sets to medical personnel in local proximity to the individual

13   patient; and

14   at a fourth level of feedback, code for communicating a set of

15   reprogramming instructions based on analysis of the one or more collected

16   measurements sets to the implantable medical device.

1   81.   (withdrawn): A system for automated remote cardiac patient care

2   using cardiovascular patient information retrieved from [[a]] an implantable

3   cardiac ~~monitoring device adapted to be implanted in a patient~~, comprising:

4   a telemetry transceiver retrieving on a substantially regular basis a set of

5   cardiovascular measurements regularly recorded by and stored in the implantable

6   cardiac ~~monitoring~~ device ~~adapted to be implanted~~ and periodically

7   communicating the collected cardiovascular measurements set;

8   a centralized server, comprising:

9   a database ~~module~~ storing the collected cardiovascular

10   measurements set into a patient care record for the individual patient;

11   a database <u>module</u> coupled to the centralized server organizing a

12   plurality of patient care records in the database, comprising defining each patient

13   care record comprising a plurality of the collected cardiovascular measurements

14   sets, and specifying each collected cardiovascular measurements set comprising

15   individual cardiovascular measurements which each relate to patient information

16   recorded by the cardiac monitoring device for an individual patient;

17   an analysis module analyzing one or more of the collected

18   cardiovascular measurements sets in the patient care record for the individual

19   patient relative to one or more other collected cardiovascular measurements sets

20   stored in the patient care records in the database; and

21   a feedback module sending feedback based on the analysis of the

22   one or more collected cardiovascular measurements sets to the individual patient.

1   82.   (withdrawn): A method for automated remote cardiac patient care

2   using cardiovascular patient information retrieved from [[a]] <u>an implantable</u>

3   cardiac <s>monitoring</s> device <s>adapted to be implanted in a patient</s>, comprising:

4   retrieving on a substantially regular basis a set of cardiovascular

5   measurements regularly recorded by and stored in the <u>implantable</u> cardiac

6   <s>monitoring</s> device <s>adapted to be implanted</s>;

7   periodically communicating the collected cardiovascular measurements set

8   to a centralized server;

9   storing the collected cardiovascular measurements set into a patient care

10   record for the individual patient in a database coupled to the centralized server;

11   organizing a plurality of patient care records in the database, comprising:

12   defining each patient care record comprising a plurality of the

13   collected cardiovascular measurements sets; and

14   specifying each collected cardiovascular measurements set

15   comprising individual cardiovascular measurements which each relate to patient

16   information recorded by the cardiac monitoring device for an individual patient;

17   analyzing one or more of the collected cardiovascular measurements sets

18   in the patient care record for the individual patient relative to one or more other

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19   collected cardiovascular measurements sets stored in the patient care records in

20   the database; and

21   sending feedback based on the analysis of the one or more collected

22   cardiovascular measurements sets to the individual patient.